

Local Hazard Mitigation Planning Project Kickoff Meeting – October 28, 2020



Four Phases of Emergency Management





Four Phases of Emergency Management

Preparedness

- Increases a community's ability to respond when a disaster occurs
- NIMS: "a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure effective coordination during incident response."

Response

• Response actions carried out immediately before, during, and after a hazard impact are aimed at saving lives, reducing economic losses, alleviating suffering, and limiting unfavorable outcomes

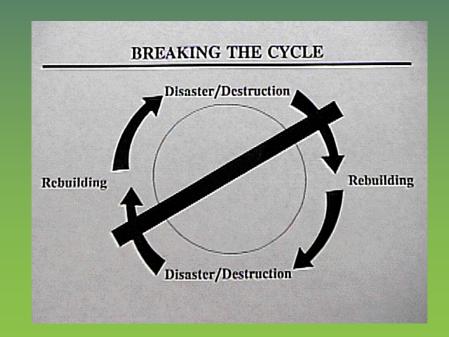
Recovery

- Actions taken to return a community's systems and activities to normal
- Restoration of services/repair of physical, social and economic damages



Hazard Mitigation

Mitigation defined: Any SUSTAINED action taken to reduce or eliminate long-term risk to human life and property from hazards



Effective mitigation efforts can break the cycle of disaster damage, reconstruction, and repeated damage



Hazard Mitigation

- Measures that reduce the chance of an disaster happening, or reduce the damaging effects of unavoidable disasters
- Reduces loss of life, property damage, and economic hardship
- Increases communication and cooperation within the community

through the planning process

- Allows communities to minimize postdisaster disruptions and recover more rapidly
- Long-term fix



Why Hazard Mitigation?

More hazards

• More people living in hazard-prone areas

• More disaster declarations

 Increasing costs of disaster response and recovery is unmanageable



Hazard Mitigation Planning

Disaster Mitigation Act of 2000

- Continued eligibility for mitigation funds, pre- and post- disaster
- Guide mitigation activities in a coordinated & economic manner
- Incorporate into other existing planning mechanisms
- Future Development: plan and build wisely
- Reduce losses
- Make community more disaster resistant





Hazard Mitigation Planning

Local Hazard Mitigation Plan

• a single or multi-jurisdictional planning document that identifies and profiles specific hazard risks & vulnerabilities and then addresses & prioritizes potential mitigation projects that can reduce those specific risks and vulnerabilities.



FEMA's 4-Phase-10 Step DMA/CRS Planning Process

Phase I: Organize Resources

- 1) Get organized
- 2) Plan for public involvement
- 3) Coordinate with other departments and agencies

Phase II: Risk Assessment

- 4) Identify the hazard(s)
- 5) Assess the risks

Phase III: Mitigation Strategy

- 6) Set planning goals
- 7) Review mitigation alternatives
- 8) Draft and action plan

Phase IV: Adoption and Implementation

- 9) Adopt the plan
- 10) Implement the plan, evaluate its worth, and revise as needed

Phase I: Organize Resources

- 1) Get organized
- 2) Plan for public involvement
- 3) Coordinate with other department and agencies





1) Get Organized – To Prepare the Plan

- Obtain communities' commitment to mitigation
- Determine and assign staff
- Establish your mitigation planning team
 - County Departments
 - Other stakeholders: local, city, state, and federal agencies, public, neighboring jurisdictions

- County Departments
 - Planning and Building
 - Public Works
 - GIS Mapping
 - Parks and Recreation
 - Fire
 - Economic and Community Development
 - Floodplain Management
 - Emergency Services
 - Facilities
 - Engineering
 - Police

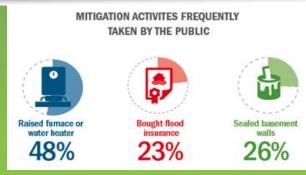


2) Plan for Public Involvement – Options

- Include on planning team
- Post data on websites
- Develop press releases
- Host public input meetings
- Hold "neighborhood" meetings
 - On their "turf"
 - Facilitates public involvement
 - Review ideas, get feedback
- Use surveys/questionnaires



Take our survey online now!





3) Coordinate with Other Departments & Agencies

- Cal OES State Hazard Mitigation Officer
- FEMA Region IX
- State Flood Insurance Coordinator
- US Army Corps of Engineers
- US Geological Survey
- Caltrans
- Cal Fire
- DWR
- National Weather Service
- Red Cross
- Neighboring Jurisdictions





Northridge, 1994

Imperial Valley, 189

Earthquakes

6.0 - 7.0

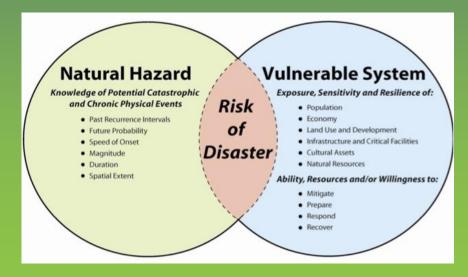
7.1 - 7.5

Shaking Hazard

Phase II: Risk Assessment

Three Components

- 4) Hazard Identification (what can happen here?)
- 5) Vulnerability Assessment (what will be affected?)
 Capability Assessment (how prepared are we?)





4) Hazard Identification & Profiles – What Can Happen Here?

- Hazard / Problem description
- Hazard extent (maps)
- Past occurrences
- Seasonal patterns
- Speed of onset / duration
- Magnitude / secondary effects
- Significance
- Frequency / likelihood of future occurrences





5) Vulnerability Assessment – What will be affected?

- Inventory residential and commercial structures
- Inventory critical facilities
- Determine value of structures
- Determine the number of people in the area

- Identify vulnerable infrastructure
- Identify development trends / constraints
- Identify historic, cultural, and natural resource areas
- Estimate losses



Capability Assessment

- Conduct an inventory of communities existing and proposed policies, programs, and ordinances that may affect its vulnerability to hazards.
- Evaluate the effectiveness of each for mitigation purposes. Note any gaps, shortfalls or conflicts associated with their design, enforcement of implementation. Identify any special opportunities.
- Determine the communities' technical and fiscal abilities to implement mitigation initiatives. Include ability to attract and leverage funding.



Phase III: Develop a Mitigation Plan

- 6) Set planning goals
- 7) Review mitigation alternatives
- 8) Draft an action plan



6) Set Planning Goals – Using the risk assessment

- Areas of extreme vulnerability
 - At-risk existing facilities
 - At-risk critical facilities
 - At-risk cultural and natural resources
 - At-risk areas slated for future development

- Goals from other existing plans
- Other opportunities
 - Repetitive losses
 - Public education
 - Increased insurance coverage



7) Review Mitigation Action Alternatives

- Prevention
- Property protection
- Natural resource protection
- Emergency services
- Structural projects
- Public information
- Multi-hazard measures and considerations
- No action





Hazard Mitigation Strategies

Three Ways to Promote Change

- Reduce the hazard take an action to affect the hazard itself
- Reduce the impact (physical or economic) take an action to mitigate structural loss or financial loss
- Change behavior/people









Hazard Mitigation: Flood

Reduce the hazard

• Divert or detain floodwaters (dams, levees, detention ponds, diversion structures

Reduce the impact (physical or economic)

• Floodproof/Elevate structures; Elevate utilities

Change behavior/people

- Designate high risk properties as open space
- Develop, adopt, and enforce floodplain regulations
- Train people to respond to flood watches and warnings
- Flood Insurance



Hazard Mitigation: Wildfire

Reduce the hazard

- Create fuel breaks
- Vegetation management

Reduce the impact (physical or economic)

- Build using fire resistant materials
- Create defensible space

Change behavior/people

- Use zoning restrictions to prevent building in highest risk or limited access areas
- Conduct evacuation planning activities
- Homeowner's insurance



Hazard Mitigation: Earthquake

Reduce the hazard – Few options

Reduce the impact (physical or economic)

- Conduct seismic retrofitting for critical facilities and infrastructure
- Strengthen and retrofit non-reinforced masonry buildings
- Retrofit building veneers to prevent failure
- Build a safe room to provide protection
- Install window film to prevent injuries from shattered glass
- Anchor rooftop-mounted equipment

Change behavior/people

- Increase public awareness about earthquake risk and safety measures
- Train builders, architects, engineers to enhance code use and enforcement
- Insurance



Hazard Mitigation Strategies







Review of Mitigation Alternatives – Criteria for selecting mitigation measures

- Will it work?
- Is it cost-beneficial?
- Is it affordable?
- Is it legal?
- Is it fair?
- Do people want it?

- Is funding available?
- Are there administrative burdens?
- Is it politically acceptable to community leaders?
- Is it environmentally sound?



Phase IV: Adopt and Implement the Plan

- 9) Adopt the Plan
 - Official Adoption by Council or Board
 - Public input before adoption

10) Implement the Plan

- Assign an overall project manager
- Integrate actions into staff work plans
- Monitor changes in vulnerability
- Report on progress, publicize successes
- Revise the plan as necessary (every 5 years for DMA)



NFIP Community Rating System - Basics

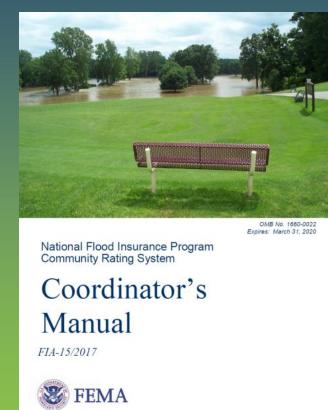
- Voluntary program
- Recognizes activities that go above and beyond the minimum requirements of the NFIP
- Modeled on the fire insurance rating system
- Insurance Services Office (ISO)



2017 Coordinator's Manual

Goals of the CRS

- Reduce and avoid damage to insurable structures
- Strengthen and support the insurance aspects of the NFIP
- Foster comprehensive floodplain management







Premium Discount by CRS Class

Table 110-1.	CRS classes,	credit points,
and p	oremium disco	ounts.

CRS Close	Credit Points (cT)	Premium Reduction		
CRS Class		In SFHA	Outside SFHA	
1	4,500+	45%	10%	
2	4,000-4,499	40%	10%	
3	3,500–3,999	35%	10%	
4	3,000–3,499	30%	10%	
5	2,500-2,999	25%	10%	
6	2,000–2,499	20%	10%	
7	1,500–1,999	15%	5%	
8	1,000–1,499	10%	5%	
9	500–999	5%	5%	
10	0–499	0	0	

Unincorporated Placer County is a CRS Class 5



Over 1,500 Participating Communities

- CRS communities represent only 7% of the over 22,000 NFIP communities; over 70% (3.6 M) of all flood insurance policies written in CRS communities
- Notable CRS (California) communities:
 - Class 1 (1 total): Roseville, California
 - Class 2 (8 total): Sacramento County; City of Sacramento, Colorado, Illinois, Oklahoma, Washington
 - Class 3 (3 total): Kentucky, Florida, New Jersey
 - Class 4 (6 total): Arizona, Florida, North Carolina, South Carolina



Placer County Flood Insurance Policies

Placer County:

As of August 7, 2020, unincorporated Placer County had 815 flood insurance policies, 237 of which were for structures located in the Special Flood Hazard Area (SFHA).

Unincorporated Placer County saves \$107,587 annually on the costs of flood insurance premiums; \$398 saved on policies in the SFHA and \$48 on policies outside the SFHA.



CRS Program Benefits

- ✓ Money stays in the community
- ✓ Insurance savings offset costs
- ✓ Improved flood protection
- ✓ Better organized programs
- ✓ Evaluate vs. national benchmark
- ✓ Technical assistance
- ✓ Incentive to keep implementing





Community Responsibilities

- ✓ Pass a CAV (Community Assistance Visit)
- ✓ Designate CRS Coordinator
- ✓ Implement activities
- ✓ Annual recertification
- ✓ Maintain Elevation Certificates, FIRMs, forever
- ✓ Maintain other records until cycle



CRS Activities and Credits

Table 110-2. Credit points awarded for CRS activities.*					
Activity	Maximum Possible Points	Maximum Points Earned	Average Points Earned	Percentage of Communities Credited	
300 Public Information Activities					
310 Elevation Certificates	116	116	38	96%	
320 Map Information Service	90	90	73	85%	
330 Outreach Projects	350	350	87	93%	
340 Hazard Disclosure	80	62	14	84%	
350 Flood Protection Information	125	125	38	87%	
360 Flood Protection Assistance	110	100	55	41%	
370 Flood Insurance Promotion ⁵	110	110	39	4%	
400 Mapping and Regulations		570		550	
410 Flood Hazard Mapping	802	576	60	55%	
420 Open Space Preservation	2,020	1,603	509	89%	
430 Higher Regulatory Standards	2,042	1,335	270	100%	
440 Flood Data Maintenance	222	249	115	95%	
450 Stormwater Management	755	605	132	87%	
500 Flood Damage Reduction Activities					
510 Floodplain Mgmt. Planning	622	514	175	64%	
520 Acquisition and Relocation	2,250	1,999	195	28%	
530 Flood Protection	1,600	541	73	13%	
540 Drainage System Maintenance	570	454	218	43%	
600 Warning and Response					
610 Flood Warning and Response	395	365	254	20%	
620 Levees	235	207	157	0.5%	
630 Dams	160	99	35	35%	



Activity 510 Floodplain Management Planning

Table 510-1. Mitigation and CRS planning steps.					
Multi-Hazard Mitigation Planning	CRS	Maximum			
Regulations (44 CFR 201.6)	Planning Steps	Points			
Phase I - Planning process					
201.6(c)(1)	1. Organize	15			
201.6(b)(1)	Involve the public	120			
201.6(b)(2) & (3)	3. Coordinate	35			
Phase II - Risk assessment					
201.6(c)(2)(i)	Assess the hazard	35			
201.6(c)(2)(ii) & (iii)	Assess the problem	52			
Phase III - Mitigation strategy					
201.6(c)(3)(i)	6. Set goals	2			
201.6(c)(3)(ii)	Review possible activities	35			
201.6(c)(3)(iii)	Draft an action plan	60			
Phase IV - Plan maintenance					
201.6(c)(5)	Adopt the plan	2			
201.6(c)(4)	10. Implement, evaluate, revise	26			
	Total	382			

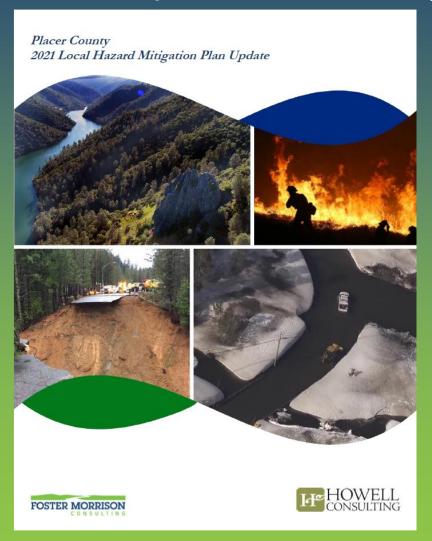


Benefits of Integrating CRS into Mitigation Planning

- An integrated mitigation planning process with more specific flood mitigation actions and projects
- Eligibility for FEMA mitigation grants to help fund actions and projects recommended in the plan
- Credits toward a reduction in flood insurance premiums in CRSparticipating communities
- Familiarizing more communities with the CRS program and flood insurance benefits



The Placer County LHMP Update 2021





The Role of the Hazard Mitigation Planning Committee/Steering Committee

Why you are here!

- Attend meetings and participate in the planning process
- Provide requested data
- Review drafts and provide comments
- Identify projects to be eligible for funding
- Coordinate and participate in the public input process
- Coordinate the formal adoption



Participating Jurisdictions

Placer County

City of Auburn

City of Colfax

Town of Loomis

City of Lincoln

City of Rocklin

Foresthill Fire Protection District

Foresthill Public Utility District*

Nevada Irrigation District

Newcastle Fire Protection District*

Northstar Community Services District

North Tahoe Fire Protection District

North Tahoe Public Utility District

Placer County Flood Control and Water Conservation District

Placer County Water Agency

Placer Hills Fire Protection District

San Juan Water District*

Sierra College – Rocklin Cmpus

South Placer Fire Protection District

Olympic Valley Public Services District

Tahoe City Public Utilities District

Truckee Fire Protection District

*New Participating Jurisdictions



Project Schedule

October 2020 – Project Kickoff

October 2020- Kickoff Meetings (HMPC and Public)

February 2020– Risk Assessment Meetings

February 2021– Mitigation Strategy Meetings

April 2021- HMPC Review Draft

May 2021– Public Review Draft

June 2021 - Final Meetings (HMPC and Public)

June 2021 – Plan Submittal to Cal OES/FEMA

??? – FEMA APA Letter

??? – Jurisdictional Adoptions

??? - Final FEMA Approval - 2021 LHMP Update



The Hazards

Agriculture Pests and Disease

Avalanche

Climate Change

Dam Failure

Drought and Water Shortage

Earthquake

Flood: 1%/0.2% annual chance

Flood: Localized/Stormwater

Landslide, Mudslide, & Debris

Flows

Levee Failure

Pandemic

Seiche

Severe Weather: Extreme Heat

Severe Weather: Freeze & Snow

Severe Weather: Heavy Rains and

Storms (hail, lightning)

Severe Weather: High Winds and

Tornadoes

Wildfire



Thank you!

Placer County, California

Local Hazard Mitigation Planning Project









